

REMARKS

Applicant would like to thank Examiners Merek and Pascua for extending the courtesy to Applicant's representative, James Heintz, of an in-person interview on October 2, 2003 and a follow-up telephonic interview on October 16, 2003. During the interviews, the Seiz and Purves references were discussed. In particular, Applicant's representative suggested, as explained more fully below, that the Seiz reference did not show a toroidal rib but rather a longitudinal rib with a Y-shaped cross section. Examiner Merek mentioned the possibility of obtaining a translation of Seiz to resolve the issue. The characterization of the rib of the present invention as "Y" shaped was also discussed.

Claim 1 stands rejected under 35 U.S.C. §103 as being unpatentable over Purves in view of Seiz (DE 197 32 285). This rejection is respectfully traversed. In order to establish a *prima facie* case of obviousness three requirements must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine reference teachings. Second, there must be a reasonable expectation of success. Third, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The combination of Purves and Seiz fails the first and third of these tests.

Applicant respectfully submits that there is no motivation to combine Purves with Seiz. Purves is directed toward a boiler flue. Reversing the ribs of Purves as suggested in the Office Action would restrict the flow of gases through the flue, which would make the flue unfit for its intended purpose. If a proposed modification would rendered the prior art as unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. MPEP §2143.01.

Additionally, the Office Action states that Seiz teaches a "Y" shaped rib for supporting

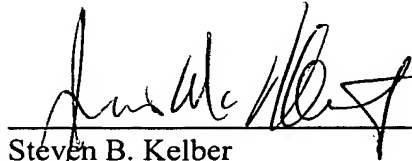
tunnel tubes "where the distal end of the trunk is on the interior of the toroid." Applicant respectfully disagree. The "rib" of Seiz is not a toroid, but rather runs longitudinally along the tunnel. See Seiz, Figure 3. Accordingly, neither Seiz nor Purves show a toroidally shaped rib with a "Y" shaped cross section and the trunk of the "Y" on the interior of the toroid as required by Claim 1. Accordingly, the rejection is respectfully traversed and withdrawal of the rejection is respectfully requested.

Claims 1, 2, 3, 5, 8, 31 - 34, 38 - 40, 42, and 48 all stand rejected as being unpatentable over the combination of Berg (U.S. Patent No. 5,720,404) in view of Seiz. This rejection is respectfully traversed. Applicant respectfully submit that this rejection is again based on the mischaracterization of Seiz as teaching a "Y" shaped rib with a distal end on the interior of a toroid. As discussed above, the "rib" of Seiz is not a toroid but rather is oriented along a longitudinal axis of the tunnel.

In light of the above, Applicant submit that this application is now in condition for allowance and therefore request favorable consideration. If any issues remain, the Examiner is respectfully requested to contact Applicant's counsel, James M. Heintz at (202) 861-4167.

Respectfully submitted,

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